

*REMARKS/ARGUMENTS**The Present Invention*

The present invention is directed to a method of real-time detecting and quantifying a first amplicon and a second amplicon in a PCR mixture.

The Pending Claims

Claims 9, 12, 15-18, 20, 21, 23, 26-28, 85, 87, and 90-96 are pending.

The Final Office Action

The rejection of claims 9, 11-18, 20-28, under 102 (e) as allegedly anticipated by U.S. Patent 6,472,156 (hereinafter the '156 patent) is maintained. The final Office Action additionally rejects claims 85-96 under 102 (e) as allegedly anticipated by the '156 patent. Reconsideration of the rejection is hereby requested.

The Amendments to the Claims

Claims 9, 21, and 85 have been amended to incorporate the features of claims 11, 22, and 86, respectively. Claims 11, 22, and 86 have been canceled accordingly. Claims 12, 23, and 87 have been amended to change the dependencies in view of the cancellation of claims 11, 22, and 86. Claims 13, 14, 24, 25, 88, and 89 also have been canceled. All dependent claims have been amended to include a comma after the dependent claim number. Claims 9, 21, and 85 have been amended to include a comma after the term "mixture" in the first line of (a). Claim 9 also has been amended to include a comma after the term "first T_m " in the fourth line of (b). Furthermore, claims 9, 21, and 85 have been amended to recite "during each thermal cycle" in the first lines of (b) and (c) and to recite "a first amplicon and a second amplicon" in the preamble, which is supported by the specification at, for example, paragraph [0088], beginning on page 29. Claims 9 and 85 have been amended to recite "wherein the first measuring temperature is," "wherein the second measuring temperature is," and/or "wherein the third measuring temperature is" in (b). Claim 21 has been amended to recite "at a measuring temperature which is" throughout (b). Moreover, claim 96 has been amended to recite "are the same." No new matter has been added by way of these amendments.

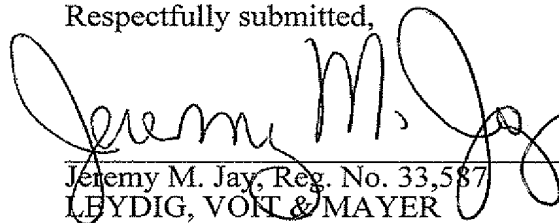
The Discussion of the Anticipation Rejection

The Office Action maintains the anticipation rejection of the non-final Office Action and finally rejects all of the pending claims as allegedly anticipated by the '156 patent. The rejection is traversed, because all of the independent claims (claims 9, 21, and 85) have been amended herein to (include the limitations of claims 11, 22, and 86, respectively,) to specify that the double stranded DNA dye is a double stranded DNA intercalating dye, such that all of the pending claims require that the emission of a double stranded DNA intercalating dye is taken at multiple temperatures during each thermal cycle. The '156 patent discloses measuring at multiple temperatures the emission of a FRET acceptor, which is not a double stranded DNA intercalating dye. Accordingly, the rejection cannot stand. Applicants therefore request that the withdrawal of the anticipation rejection be withdrawn.

Conclusion

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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Date:

13 Sep. 2007